

## Statistical output for Table S4

File name: HPLC data analysis + stats  
+ plots BEB\_working.R

Statistical comparisons of interest (treatment groups vs. vehicle control) are indicated in the red boxes

PND 5.5 serum

```
> summary(glht(aov(ng.ml~group, data=ser), linfct=mcp(group="Tukey")))

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Tukey Contrasts

Fit: aov(formula = ng.ml ~ group, data = ser)

Linear Hypotheses:

Estimate Std. Error t value
0.1 mg/kg PFOA - Vehicle Control == 0 2266.2 563.9 4.019
1.0 mg/kg PFOA - Vehicle Control == 0 13015.5 563.9 23.081
0.2 mg/kg GenX - Vehicle Control == 0 412.8 563.9 0.732
1.0 mg/kg GenX - Vehicle Control == 0 1315.6 563.9 2.333
2.0 mg/kg GenX - Vehicle Control == 0 2148.4 563.9 3.810
1.0 mg/kg PFOA - 0.1 mg/kg PFOA == 0 10749.3 651.1 16.509
0.2 mg/kg GenX - 0.1 mg/kg PFOA == 0 -1853.4 651.1 -2.846
1.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 -950.6 651.1 -1.460
2.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 -117.8 651.1 -0.181
0.2 mg/kg GenX - 1.0 mg/kg PFOA == 0 -12602.7 651.1 -19.355
1.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 -11699.9 651.1 -17.969
2.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 -10867.1 651.1 -16.689
1.0 mg/kg GenX - 0.2 mg/kg GenX == 0 902.8 651.1 1.386
2.0 mg/kg GenX - 0.2 mg/kg GenX == 0 1735.6 651.1 2.666
2.0 mg/kg GenX - 1.0 mg/kg GenX == 0 832.8 651.1 1.279
Pr(>|t|)
0.1 mg/kg PFOA - Vehicle Control == 0 0.00461 **
1.0 mg/kg PFOA - Vehicle Control == 0 < 0.001 ***
0.2 mg/kg GenX - Vehicle Control == 0 0.97590
1.0 mg/kg GenX - Vehicle Control == 0 0.21206
2.0 mg/kg GenX - Vehicle Control == 0 0.00781 **
1.0 mg/kg PFOA - 0.1 mg/kg PFOA == 0 < 0.001 ***
0.2 mg/kg GenX - 0.1 mg/kg PFOA == 0 0.07715 .
1.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 0.68882
2.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 0.99997
0.2 mg/kg GenX - 1.0 mg/kg PFOA == 0 < 0.001 ***
1.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 < 0.001 ***
2.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 < 0.001 ***
1.0 mg/kg GenX - 0.2 mg/kg GenX == 0 0.73217
2.0 mg/kg GenX - 0.2 mg/kg GenX == 0 0.11250
2.0 mg/kg GenX - 1.0 mg/kg GenX == 0 0.79174
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- single-step method)
```

PND 5.5 urine

```
> summary(glht(aov(ng.ml~group, data=ur), linfct=mcp(group="Tukey")))

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Tukey Contrasts

Fit: aov(formula = ng.ml ~ group, data = ur)

Linear Hypotheses:

Estimate Std. Error t value
0.1 mg/kg PFOA - Vehicle Control == 0 97.50 342.05 0.285
1.0 mg/kg PFOA - Vehicle Control == 0 412.51 342.05 1.206
0.2 mg/kg GenX - Vehicle Control == 0 512.33 342.05 1.498
1.0 mg/kg GenX - Vehicle Control == 0 1805.52 342.05 5.279
2.0 mg/kg GenX - Vehicle Control == 0 3402.21 342.05 9.947
1.0 mg/kg PFOA - 0.1 mg/kg PFOA == 0 315.01 394.96 0.798
0.2 mg/kg GenX - 0.1 mg/kg PFOA == 0 414.83 394.96 1.050
1.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 1708.02 394.96 4.325
2.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 3304.71 394.96 8.367
0.2 mg/kg GenX - 1.0 mg/kg PFOA == 0 99.82 394.96 0.253
1.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 1393.01 394.96 3.527
2.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 2989.70 394.96 7.570
1.0 mg/kg GenX - 0.2 mg/kg GenX == 0 1293.19 394.96 3.274
2.0 mg/kg GenX - 0.2 mg/kg GenX == 0 2889.88 394.96 7.317
2.0 mg/kg GenX - 1.0 mg/kg GenX == 0 1596.69 394.96 4.043
Pr(>|t|)
0.1 mg/kg PFOA - Vehicle Control == 0 0.99971
1.0 mg/kg PFOA - Vehicle Control == 0 0.82865
0.2 mg/kg GenX - Vehicle Control == 0 0.66561
1.0 mg/kg GenX - Vehicle Control == 0 < 0.001 ***
2.0 mg/kg GenX - Vehicle Control == 0 < 0.001 ***
1.0 mg/kg PFOA - 0.1 mg/kg PFOA == 0 0.96520
0.2 mg/kg GenX - 0.1 mg/kg PFOA == 0 0.89540
1.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 0.00204 **
2.0 mg/kg GenX - 0.1 mg/kg PFOA == 0 < 0.001 ***
0.2 mg/kg GenX - 1.0 mg/kg PFOA == 0 0.99984
1.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 0.01600 *
2.0 mg/kg GenX - 1.0 mg/kg PFOA == 0 < 0.001 ***
1.0 mg/kg GenX - 0.2 mg/kg GenX == 0 0.02937 *
2.0 mg/kg GenX - 0.2 mg/kg GenX == 0 < 0.001 ***
2.0 mg/kg GenX - 1.0 mg/kg GenX == 0 0.00431 **
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- single-step method)
```

## Statistical output for Fig. 2

File name: PND0.5 and PND5.5 weights\_BEB\_05252021.R

```
> ## Same model run with different package to obtain p-value in model summary output
> summary(lme(weight~group+LitterSize,random=~1|DamID, data=pnd5))
Linear mixed-effects model fit by REML
Data: pnd5
      AIC      BIC    logLik
653.569 694.2943 -317.7845

Random effects:
Formula: ~1 | DamID
      (Intercept) Residual
StdDev:  0.2529485 0.3494981

Fixed effects: weight ~ group + LitterSize
              Value Std.Error DF   t-value p-value
(Intercept)  5.247649 0.22862363 633 22.953220 0.0000 ← P<0.001
groupGenX 0.2 mg/kg -0.030700 0.12491549  49 -0.245764 0.8069
groupGenX 1.0 mg/kg -0.337676 0.12583046  49 -2.683580 0.0099
groupGenX 2.0 mg/kg -0.356153 0.12339543  49 -2.886274 0.0058 ← P<0.01
groupPFOA 0.1 mg/kg -0.035856 0.12574751  49 -0.285142 0.7767
groupPFOA 1.0 mg/kg -0.187692 0.12475416  49 -1.504498 0.1389
LitterSize   -0.117646 0.01616037  49 -7.279905 0.0000 ← P<0.001

Correlation:
              (Intr) gGX0.m gGX1.m gGX2.m gPF00m gPF01m
groupGenX 0.2 mg/kg -0.309
groupGenX 1.0 mg/kg -0.335  0.473
groupGenX 2.0 mg/kg -0.397  0.486  0.487
groupPFOA 0.1 mg/kg -0.353  0.475  0.475  0.490
groupPFOA 1.0 mg/kg -0.265  0.473  0.470  0.480  0.470
LitterSize          -0.927  0.056  0.085  0.147  0.105  0.007

Standardized Within-Group Residuals:
      Min      Q1      Med      Q3      Max
-5.21218322 -0.50378190  0.06382413  0.58940432  3.20138110

Number of Observations: 689
Number of Groups: 56
```